Operating and Service Manual

MODEL

DC2600

PART NUMBER

1007850-501

SERIAL NUMBER

21753

AMPLIFIER RESEARCH
Souderton, PA 18964-9990 USA
TEL 215-723-8181 TWX 510-661-6094 FAX 215-723-5688

MP MASTER
MA34438

OPERATING INSTRUCTIONS

CAUTION:

Do not obstruct air holes on side. Physical location must be such that air flows through unit.

WARNING:

DO NOT EXCEED MAXIMUM POWER RATINGS.
DO NOT DROP. INTERNAL COMPONENTS ARE FRAGILE.

Operation of the Model DC2600 is quite simple. The input signal is fed into the jack (J1) marked Input and the output is taken from the jack (J2) marked Output. The input and output jacks on the unit are Type N (Female).

Forward coupled output is taken from jack (J3) marked FWD, and REVERSE coupled output is taken from jack (J4) marked REV. Both coupled output jacks on the unit are Type SMA (Female).

See Specification Sheet for detailed specification

AMPLIFIER RESEARCH
160 School House Road, Souderton, PA 18964-9990 USA
TEL 215-723-8181 • FAX 215-723-5688

MODEL DC2600
Dual Directional Coupler
10KHz-100MHz, 600 watts
100MHz-250MHz, 300 watts

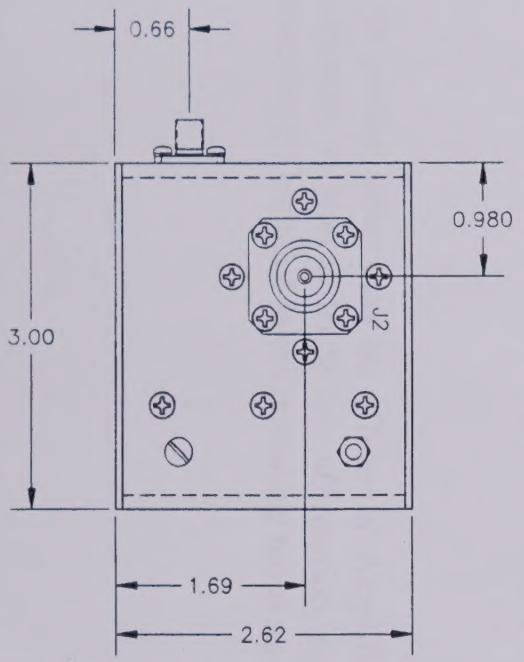
Amplifier Research Model DC2600 is a high power ultra-broadband coupler with excellent performance characteristics over a range of more than 14 octaves. This Dual Directional Coupler is a convenient means of simultaneously monitoring forward and reverse power in high power systems using normal laboratory oscilloscopes, voltmeters, powermeters, and spectrum analyzers. Model DC2600 is recommended for use with our Model 500A100 and 250A250 series amplifiers.

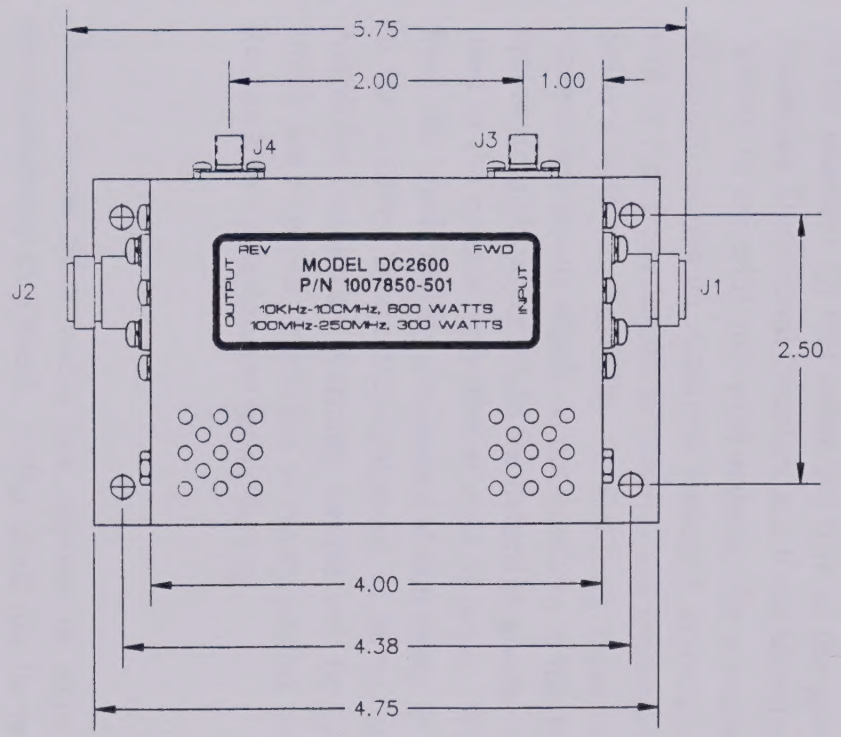
A leveled power output can be obtained from any of these amplifiers by using the coupled forward power output in conjunction with a suitable detector or power meter and our Model 888 leveling amplifier. The Model DC2600 can also be employed in a similar system which utilizes the coupled reverse power output to control the amplifier power based upon load VSWR (for protection of the load).

SPECIFICATIONS
DC2600

Frequency Range	*10KHz to 250MHz*
Power (Maximum)	*600 watts CW, 1200 Watts Peak* *10kHz-100MHz* *300 watts CW, 600 Watts Peak* *100MHz-250MHz*
Coupling Factor	*50db nominal*
Coupling Flatness	*± 0.5dB*
Directivity	*25 dB typical* *18 dB minimum*
Insertion Loss	*0.25 dB maximum*
Impedance (Main Line)	*50 ohms VSWR 1.30:1 maximum*
Connectors	
Mainline	*Type N Female*
Coupled	*Type SMA Female*
Weight (Maximum)	*0.64 kg* *1.4 lb.*
Size (W x H x D)	*10.2 cm x 7.6 cm x 6.6 cm* *4.0 in x 3.0 in x 2.6 in*

REV052396





ECN	DATE	REV.
REL	30JAN96	–
8354	30APR96	A

FOR BOM SEE 1007850-501

QTY. REQD.	ITEM	PART NO.	DESCRIPTION	MARK	FIN	MATL
		PARTS LIST				

UNLESS OTHERWISE SPECIFIED
DO NOT SCALE DRAWING
DIMENSIONS ARE IN INCHES AND INCLUDE PLATING THICKNESS
ALL THREADS ARE UNIFIED NATIONAL SERIES, CLASS 2
REMOVE ALL BURRS AND SHARP EDGES

BASIC DIMENSIONS	2 PLACE DECIMALS	3 PLACE DECIMALS
UP TO 6	± .02	± .005
ABOVE 6 TO 24	± .03	± .010
ABOVE 24	± .06	± .015

ANGULAR DIMENSIONS ± 2°

DC2600
USED ON MODEL

DRAWN C. BICKELMAN DATE 24 JAN 96
CHKD C. BICKELMAN DATE 30 JAN 96
MECH J. MAGINN DATE 31 JAN 96
ELEC P. BECKMANN DATE 30 JAN 96

AMPLIFIER RESEARCH

MODEL DC2600
BI-DIR COUPLER

DWG. NO. 1007850

SCALE 1/1 | SHEET 1 OF 1 | REV. A

WARRANTIES: LIMITATION OF LIABILITY

Seller warrants (i) that seller has title to the goods sold and (ii) that Amplifiers, Antennas, Directional Couplers and Field Monitoring Equipment will be free from defects in material and workmanship for a period of two (2) years from date of shipment shown on Amplifier Research invoice; other products and vacuum tubes will be free from defects in material and workmanship for a period of one (1) year. Seller's sole responsibility in fulfilling these warranties shall be to repair or replace any goods which do not conform to the foregoing warranties or, at seller's option, to give buyer credit for defective goods. The warranty is valid only when used in the country specified at time of order. Warranty service must be obtained from the repair facility designated at that time. If warranty service is not available in the country where the equipment is to be used then it must be returned to Amplifier Research. Warranty service will be provided only for defective goods which are returned within the warranty period, freight costs prepaid to Amplifier Research or its designated repair facility.

There are no other warranties, express or implied, including any warranty of merchantability or fitness. Seller shall not be responsible for any incidental or consequential damages arising from any breach of warranty.

No person other than an officer of Amplifier Research Corporation, has any authority to bind seller to any affirmation, representation or warranty except as specifically included in the preceding terms and conditions.

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